

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 2005-031690	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/36104	International filing date (day/month/year) 12 November 2003 (12.11.2003)	Priority date (day/month/year) 12 November 2000 (12.11.2000)
International Patent Classification (IPC) or national classification and IPC IPC(7): B02C 1/06 and US Cl.: 241/101.73, 266		
Applicant RAMUN, JOHN, R		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>7</u> sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 08 June 2004 (08.06.2004)	Date of completion of this report 04 April 2005 (04.04.2005)	
Name and mailing address of the IPRA/US Mail Stop PCT, Attn: IPRA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Mark Rosenbaum Telephone No. 571-272-4050	

Form PCT/IPEA/409 (cover sheet)(July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US03/36104

I. Basis of the report

1. With regard to the elements of the international application:*

☐ the international application as originally filed.

☒ the description:

pages 1-8 as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of _____.

☒ the claims:

pages None, as originally filed

pages 9-12c, as amended (together with any statement) under Article 19

pages None, filed with the demand

pages NONE, filed with the letter of _____.

☒ the drawings:

pages 1-13, as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of _____.

☐ the sequence listing part of the description:

pages NONE, as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in printed form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages NONE

☐ the claims, Nos. NONE

☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US03/36104

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims <u>1-36</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-36</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-36</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-36 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the tool carrier extending to the end of each jaw.

Claims 1-36 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

_____ NEW CITATIONS _____

CLAIMS

THE INVENTION CLAIMED IS:

1. A multiple tool attachment system for demolition equipment comprising:
an adapter for coupling the system to existing demolition equipment;
a body coupled to the adapter;
a pair of jaws coupled to the body, at least one of the jaws being pivotable, and
each jaw having a tool carrier extending to the end of each jaw; and
a plurality of tool attachments selectively attachable to each tool carrier for
forming distinct tool units.
2. The multiple tool attachment system according to claim 1, wherein each
tool carrier includes a mounting surface adapted to receive one of a plurality of tool
attachments that is secured to the mounting surface.
3. The multiple tool attachment system according to claim 2, wherein each
tool attachment may be secured to the mounting surface of the tool carrier through at least
one pair of opposing attachment lugs which engage and are secured within a matching
opposing pair of attachment lug retention slots.
4. The multiple tool attachment system according to claim 3, wherein the pair
of opposing attachment lug retention slots are on the tool attachment and the attachment lugs
are on the tool carrier.
5. The multiple tool attachment system according to claim 3, wherein the pair
of opposing attachment lug retention slots are on the tool carrier and the attachment lugs are
on the tool attachment.

6. The multiple tool attachment system according to claim 5, wherein the at least one pair of opposing attachment lug retention slots are separated by a central portion and a fastener hole extends through the central portion to connect each pair of opposing attachment lug retention slots; and 9, 10, 11, 12, 12A, 12B, 12C wherein each pair of opposing attachment lugs has a fastener hole extending therethrough such that when each pair of opposing attachment lugs is engaged within the respective pair of attachment lug retention slots, a fastener may extend through the fastener hole to secure the attachment lugs within the attachment lug retention slots thereby securing the tool attachment to the tool carrier.

7. The multiple tool attachment system according to claim 6, further including a stabilizing groove within the mounting surface between pairs of attachment lug retention slots to receive an engaging projection from the tool attachment.

8. The multiple tool attachment system according to claim 1, wherein one of the plurality of tool attachments is a cracker attachment.

9. The multiple tool attachment system according to claim 8, wherein the cracker attachment includes at least one double rake tooth.

10. The multiple tool attachment system according to claim 9, wherein the cracker attachment includes at least one single rake tooth.

11. The multiple tool attachment system according to claim 8, wherein the cracker attachment includes at least one single rake tooth.

12. The multiple tool attachment system according to claim 1, wherein one of the plurality of tool attachments is a pulverizing attachment.

13. The multiple tool attachment system according to claim 12, wherein the pulverizing attachment includes a pair of inserts, each insert including a plurality of teeth.

14. The multiple tool attachment system according to claim 1, wherein one of the plurality of tool attachments is a wood shear attachment.

15. The multiple tool attachment system according to claim 14, wherein the wood shear attachment includes a blade insert and an anvil insert, the blade insert cooperates with the anvil insert.

16. The multiple tool attachment system according to claim 15, wherein:
the blade insert includes a blade and a piercing tip,
the anvil insert includes a pair of spaced apart tines, and
the pair of spaced apart tines are configured to receive the blade therebetween.

17. The multiple tool attachment system according to claim 15, wherein:
the tool carrier includes a recess, and
the blade insert includes a projection configured to engage the recess.

18. The multiple tool attachment system according to claim 1, wherein one of the plurality of tool attachments is an iron/rail cracker attachment.

19. The multiple tool attachment system according to claim 18, wherein the iron/rail cracker attachment includes a single cracker insert.

20. The multiple tool attachment system according to claim 1, wherein the iron/rail cracker attachment includes a double cracker insert.

21. The multiple tool attachment system according to claim 1, wherein one of the plurality of tool attachments is a grapple attachment.

22. The multiple tool attachment system according to claim 21, wherein the grapple attachment includes a pair of grapple inserts.

23. The multiple tool attachment system according to claim 22, wherein the pair of grapple inserts each include a plurality of tines.

24. The multiple tool attachment system according to claim 23, wherein the plurality of tines of a first grapple insert are offset from the plurality of tines of a second grapple insert.

25. The multiple tool attachment system according to claim 23, wherein the plurality of tines of a first grapple insert are aligned with the plurality of tines of a second grapple insert.

26. The multiple tool attachment system according to claim 22, wherein each of the pair of grapple inserts includes a central cavity.

27. The multiple tool attachment system according to claim 26, wherein each of the pair of grapple inserts further includes:

a retaining bar;

a retaining pin including a slot configured to receive the retaining bar; and

an opening on an end of the insert configured to receive the retaining bar.

28. The multiple tool attachment system according to claim 1, wherein the plurality of fasteners includes a plurality of bolts and a plurality of nuts engageable with the bolts.

29. The multiple tool attachment system according to claim 1, further including a pair of wear plates adjacent to each of the pair of jaws and distal the body.

30. The multiple tool attachment system according to claim 1, wherein each jaw includes at least one cutting insert.

31. The multiple tool attachment system according to claim 30, further including at least one wear plate adjacent to at least one cutting insert and distal the body.

32. The multiple tool attachment system according to claim 30, wherein at least one jaw includes two cutting inserts.

33. The multiple tool attachment system according to claim 32, wherein the two cutting inserts form an apex.

34. A multiple tool attachment system for demolition equipment comprising:
a pair of jaws configured to couple to the demolition equipment, at least one of the jaws being pivotable;

a plurality of tool attachments selectively attachable to each of the pair of jaws for forming distinct tool units; and

a tool carrier on each of the jaws and extending to the end of each jaw, wherein each tool carrier includes a mounting surface adapted to receive one of a plurality of tool attachments that is secured to the mounting surface through at least one pair of opposing attachment lugs which engage and are secured within a matching opposing pair of attachment lug retention slots.

35. The multiple tool attachment system according to claim 34, wherein the plurality of tool attachments includes one or more of a cracker attachment, a pulverizing attachment, a wood shear attachment, an iron/rail cracker attachment, and a grapple attachment.

36. A multiple tool attachment system for demolition equipment comprising:
a pair of jaws configured to couple to the demolition equipment, at least one of the jaws being pivotable, and each jaw having a tool carrier extending to the end of each jaw;
a plurality of tool attachments selectively attachable to each tool carrier of the pair of jaws for forming distinct tool units; and

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REPLACEMENT PAGE

AMENDED SHEET

a plurality of fasteners;

wherein each tool carrier includes a mounting surface adapted to receive one of the plurality of tool attachments, wherein the tool attachment is secured to the mounting surface through at least one pair of opposing attachment lugs which engage and are secured within a matching opposing pair of attachment lug retention slots;

wherein the at least one pair of opposing attachment lug retention slots are separated by a central portion and a fastener hole extends through the central portion to connect each pair of opposing attachment lug retention slots; and

wherein each pair of opposing attachment lugs has a fastener hole extending therethrough such that when each pair of opposing attachment lugs is engaged within the respective pair of attachment lug retention slots, a fastener may extend through the fastener hole to secure the attachment lugs within the attachment lug retention slots thereby securing the tool attachment to the tool carrier.